

APPLEGATE AREA, THOMPSON CREEK UNIT, RECONNAISSANCE  
OF INFESTATION, JUNE 29, 1916

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ASHLAND, OREGON  
JANUARY, 1918

FILE COPY

FOREST INSECT LABORATORY,  
STANFORD UNIVERSITY CALIFORNIA.

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APPLEGATE AREA.

THOMPSON CREEK UNIT.

Pacific Slope Station, June 29, 1916.

1. Period of examination June 29, 1916. Cruised by J.D. Riggs and J.E. Patterson. Data compiled by J.E. Patterson. *This area was estimated by a general reconnaissance. A few clumps of infested trees were examined.*
2. Location of unit: The Thompson Creek Unit includes the watersheds of Thompson Creek, East McWilliams Creek and Nine Mile Creek. It includes parts of Townships 38-39 S, R 4 W, Wm. Mer., and parts of Townships 39 S, R 5W, Wm. Mer. It is bounded on the north by the Applegate River; on the east by the high divide between this and the Mt. Ben Unit; on the south by the high divide between this unit and the Steamboat Unit; on the west by East McWilliams Creek. Approximate area 37 square miles.
3. General Topography: Very steep slopes of east and west exposures. Deep creek canyons with precipitous walls. Elevations ranging from 1300 to 4800 feet, with the average of yellow pine infestation of about 2000 feet.
4. Character and stand of timber: Medium stand of yellow pine and Douglas fir on the intermediate elevations. On the lower elevations and along the creeks the stand is light with a large percentage of black oak and alder. In the higher elevations the sub-alpine type cuts in replacing the pine. Probably 75% of the yellow pine in this Unit is mature and past - very little cutting has been done on this Unit. Old burns, evidence of past fires which has thinned the stand in various places, exist in the yellow pine zone. The former stand in these burns is rapidly being replaced by new growth. The chaparral type on the lower and intermediate elevations is heavy.
5. Species of trees infested: The infested species consist of yellow pine, sugar pine and Douglas fir. Infested specimens of the last two species were few in number and scattered over the Unit within their range.
6. Species of Primary Insects: *Dendroctonus brevicornis*, *Dendroctonus monticolae*, *Ips confusus*, *Melanophila* sp.  
Percentage of primary infestation (estimated).

<i>Dendroctonus brevicornis</i>	60%	89%	} Figured from % of Board feet
<i>Dendroctonus monticolae</i>	03%	5%	
<i>Ips confusus</i> and top killed	35%	4%	
<i>Melanophila</i> sp.	02%	2%	
Total	100%	100%	



Thompson Creek, 2.

7. Past infestation. Abandoned trees:

From present conditions it would appear that past infestation has been small. This Unit is very similar to adjacent units in regard to previous infestation. Ghost trees and abandoned trees are not conspicuous, they do not exceed 4 or 5 trees to the section. The present depredations are the result of recent invasion.

8. Present infestation: (estimated).

Yellow pine.

<i>D. brevicornis</i> <sup>14</sup> - <del>14</del> No. of trees	infested.	average diameter.	average height.	board feet.*
1914 -2 gen.	10	30	110	11700
1915-1 gen.	16	28	100	14240
1915-2 gen.	55	25	90	32450
<i>Ips confusus</i> .				
1914 gen. trees.	7	12	50	115
1915 gen. trees.	6	12	50	90
Top killed and diseased.	8	20	70	1800
Sugar pine.				
<i>D. monticolae</i> .				
1915 gen.	5	30	100	3900
Douglas fir.				
<i>Melanophila</i> sp.				
1915 gen.	3	24	100	1410
Totals	112			65695

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\* Scribner's rule for California.

No. 120  
SUMMARY - THOMPSON CREEK AREA.  
APPLAGATE AREA.

1. Location: Situated on the south side of the lower Applegate River it includes the watersheds of Thompson and Nine Mile Creeks. It includes approximately 53 square miles in Townships 38 and 39 S., Ranges 4 and 5 E., Willamette Meridian.
2. Area:    Approximate total area                      21,120 Acres  
             " area timbered with pine                12,800 "
3. General Topography: Very steep slopes of east and west exposures, deep canyons with steep walls, small open valleys. Elevations range from 1200 to 4000 feet. The pine stand extends throughout this range of elevation with an average of 200 feet.
4. Character and Stand of Timber: Medium stand of yellow pine and Douglas fir on the intermediate elevations. On the lower elevations and along the creeks the stand is light with a large percentage of Black oak and alder. On the higher elevations the fir type predominates. Probably 75% of the yellow pine stand is mature and past. The chaparrall type in old burns in the intermediate and lower elevations is heavy.

Examinations: Examinations and reconnaissance of this unit was made in the spring of 1916 by J. D. Riggs and J. E. Patterson and in 1917 by J. E. Patterson.

Ashland, Oregon,  
January 1918.

Applegate Area

Thompson Creek Unit.

Reconnaissance of July 25-30.1918.

Yellow pine

Den.brevicomis.

In a close reconnaissance of the Thompson Creek basin, on July 28.1918, 19 insect killed trees were noted as having been infested by the broods of both generations of 1917.

In the estimates, allowances were made for 5 additional trees and the generations separated as follows:

1917	n'ted	est'd	d b h
1st Gen	7	9	26
2nd Gen	12	15	26.

From notes of July 28.1918: -"Thompson Creek- Some little stand of second grade pine timber in this basin and very little infestation. The situation presents itself in a way that it is easy to determine that a decrease of infestation has taken place when conditions of 1917 are compared with those of 1916."



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# THOMPSON CREEK - UNIT

## Summary of Loss by Years.

Year	Species	No. Trees.	Ave. D.B.H.	% of Annual Loss	% increase or decrease over preceding year.
1914					
	Yellow Pine				
	D. brevicornis				
	2nd. Gen.	10	30	59.	
	Ips	7	12	41.	
	Total	17			
1915					
	Yellow Pine				
	D. brevicornis				
	1st. Gen.	16	28	23.5	
	2nd. Gen.	55	25	78.9	+610.
	Ips	6	12	7.	
	Top-killed	8*	20	14	
	Sugar Pine				
	D. monticola	5	30	9.56	
	Douglas Fir	90			
	Melanophilasp	3	24		
	Total	85			
1916					
	Yellow Pine				
	D. brevicornis				
	1st. Gen.	15	26		
	2nd. Gen.	46	25	100.	-13.26
	Total	61			
1917					
	Yellow Pine				
	D. brevicornis				
	1st. Gen.	9	26		
	2nd. Gen.	15	26	100	-60%
	Total	24			